

**GOVERNMENT OF INDIA
NEW AND RENEWABLE ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:2665

ANSWERED ON:11.03.2011

POTENTIAL OF RENEWABLE ENERGY

Chavan Shri Harischandra Deoram;Deo Shri Kalikesh Narayan Singh;Deora Shri Milind Murl;Naranbhai Shri Kachhadia;Paswan Shri Kamlesh ;Singh Shri Pashupati Nath

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the total potential of power generation from renewable energy sources in the country, source-wise and State-wise;
- (b) the share of renewable energy to the total installed capacity from all sources in the country, percentage-wise and MW-wise;
- (c) whether the cost of power generation from renewable energy sources is very high;
- (d) if so, the details thereof;
- (e) whether the Government proposes to adopt latest technologies for reducing the cost of power generated from these sources of energy; and
- (f) if so, the details thereof?

Answer

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH)

(a) : As per various studies undertaken in past, a potential of about 89,000 MW for power generation from different renewable energy sources is estimated excluding solar energy which has been estimated for most parts of the country at around 20 MW per square kilometer of open, shadow free area covered with solar collectors. State-wise details thereof are given in Annexure-I.

(b): A total grid interactive renewable power generation capacity of around 18842 MW has been set up as on 31.01.2011, which is over 11% of the total power generation installed capacity from all sources in the country.

(c)&(d): The initial capital investment in renewable energy projects is generally high and their viability is very much region / site specific. As such, the cost of renewable power generation is generally higher in comparison with the traditional sources. Details of Indicative initial capital costs and cost of electricity generation in respect of different categories of renewable power plants are given in Annexure-II.

(e)&(f): Research, design and development (RD&D) efforts are underway globally, including in this country, driven mainly by industry, to develop technologies/processes that help to align the unit cost of power generation from renewable energy sources, especially solar, to that of conventional power generation. The Ministry is supporting such efforts under its R&D programme, with CFA up to 100% of project cost to Universities, research institutions, R&D laboratories and industry, for achieving well-defined specific outputs.